

Department of Mathematics
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EDUCATION

Ph.D. in Mathematics, Michigan State University, 1996.
B.S. in Mathematics, University “Al. I. Cuza”, Iasi, Romania, 1991.

APPOINTMENTS

2023-present Robert Grimmett Professor of Mathematics, Stanford University.
2006-present Professor of Mathematics, Stanford University.
2016-2019 Department Chair, Mathematics Department, Stanford University.
Spring 2018 Member, Mathematical Sciences Research Institute.
2015-2016 Simons Fellow.
Fall 2009 Member, Mathematical Sciences Research Institute.
2004-2006 Associate Professor, Stanford University.
2004-2006 Professor, University of Wisconsin-Madison.
2002-2004 Associate Professor, University of Wisconsin-Madison.
2000-2004 Alfred P. Sloan Research Fellow.
Fall 2001 Member, Institute for Advanced Study, Princeton.
1998-2002 Assistant Professor, University of Wisconsin-Madison.
1996-1999 C.L.E. Moore Instructor, Massachusetts Institute of Technology.
Fall 1996 Postdoctoral Fellow, Mathematical Sciences Research Institute.
1991-1996 Teaching Assistant, Michigan State University.
1990-1991 Teaching Assistant, University “Al. I. Cuza”, Iasi, Romania.

NOTABLE AWARDS/HONORS

AMS Fellow (2020)
Simons Fellow (2015-2016)
Core member, Topology Panel for the International Congress of Mathematicians 2010
Invited speaker, International Congress of Mathematicians 2002 (Topology Section)
Plenary speaker, AMS National Meeting (Atlanta, 2005)
Plenary speaker, AMS Sectional Meeting (Madison 2002)
Alfred P. Sloan Research Fellow (2000-2004)

SIGNIFICANT PUBLICATIONS

A Klein TQFT: the local Real Gromov-Witten theory of curves (with P. Georgieva),
Advances in Math 391 (2021), 1-70.
The Gopakumar-Vafa formula for symplectic manifolds (with T. Parker),
Annals of Math., Volume 187 (2018), 1-64.
GW Invariants Relative Normal Crossings Divisors,
Advances in Math., Volume 281 (2015), 40-141.
Relations in the tautological ring of \mathcal{M}_g ,
Duke Math. J., Volume 129 (2005), 157-186.
The symplectic sum formula for Gromov-Witten invariants (with T. Parker),

Annals of Math., Volume 159 (2004), 935-102. *Corrigendum*, arXiv:1510.06943.
Relative Gromov-Witten Invariants (with T. Parker),
Annals of Math., Volume 157 (2003), 1-52.
Topological Recursive Relations in $H^{2g}(M_{g,n})$,
Inventiones Math., Volume 148 (2002), 627-658.
Genus One Enumerative Invariants in \mathbb{P}^n with Fixed j Invariant,
Duke Math. J., Volume 94 (1998), 279-324.

RECENT PUBLICATIONS AND PREPRINTS

The Gopakumar-Vafa finiteness conjecture (with A. Doan and T. Walpuski),
preprint, arXiv:2103.08221.
Splitting formulas for the local real Gromov-Witten invariants (with P. Georgieva),
J. Symplectic Geom., Volume 20 (2022), pp. 561-664.
Thin compactifications and virtual fundamental classes (with T. Parker),
J. Symplectic Geom., Volume 17 (2019), 703-752.
Relating VFCs on thin compactifications (with T. Parker),
Mathematische Annalen, Volume 375 (2019), 845-893.

SELECTED RECENT TALKS

Topology of 4-manifolds and Related Topics, Jeju, Korea, Jan 2024.
SFT10 Symplectic Field Theory Workshop, Humboldt University, Berlin, Aug 2023.
The Tenth Congress of Romanian Mathematicians, Pitesti, Romania, July 2023.
Western Hemisphere Virtual Symplectic Seminar, online, June 2021.
8th Pacific Rim Conference, virtual talk, Aug 2020.
Seminar Symplectix, Institut Henri Poincare, Paris, Mar 2020.
Geometry and Analysis of Moduli Spaces Workshop, Imperial College, London, Jan 2020.
Mirror Symmetry in Higher Genus Workshop, Mini-course/four lectures, IMPA, Rio de Janeiro,
Nov 2019.
International Symplectic Topology Conference, IMPA, Rio de Janeiro, Aug 2019.
Connections for Women: Enumerative Geometry Beyond Numbers, MSRI, Jan 2018.
Floer Memorial Lecture, Berkeley, Oct 2017.
Symplectic Geometry: A celebration of the work of Simon Donaldson, Isaac Newton Institute,
Cambridge, Aug 2017.
Symplectic Geometry and Topology Conference, International Centre for Mathematical Sciences,
Edinburgh, July 2016.
7th Pacific Rim Conference on Mathematics, Seoul National University, Korea, June 2016.
Perspectives on topology and geometry of 4-manifolds, Dubrovnik, Croatia, June 2016.
Symplectic Geometry and Topology Workshop, Uppsala University, Sweden, Sept 2015.
Workshop on Conservative Dynamics and Symplectic Geometry talk, IMPA, Rio de Janeiro, Aug 2015.
Workshop on Moduli Spaces of Pseudo-holomorphic Curves, Mini-course/four lectures
(joint with T. Parker), Simons Center for Geometry and Physics, March 2014.
Symplectic Seminar, Simons Center for Geometry and Physics, March 2014.
Gokova Geometry Topology Conference talk, Gokova, Turkey, May 2014.
Joint Princeton/Institute for Advances Study Symplectic Geometry Seminar talk, Nov 2013.
Program for Women in Mathematics, five Graduate Lectures, IAS, Princeton, (2012 and 2002).

SELECTED PROFESSIONAL SERVICE

Member, AMS Committee on the Profession, 2019-2022.

Member, Association for Women in Mathematics Awards Committee, 2017-2020.

Core member, Topology Panel for the International Congress of Mathematicians 2010.

Academic editor, *Geometry&Topology*, 2005-2009.

Department Chair, Mathematics Department, Stanford University, 2016-2019.

Director of Graduate Studies, Mathematics Department, Stanford University, 2013-2015.

Member, Stanford Science Fellows Steering Committee, 2019-2022.

Member, Stanford H&S Dean Search Committee, 2017-2018.

Scientific organizer and special section co-organizer, 9th Pacific Rim Conference, Darwin, Australia, June 2024.

Co-organizer, Stanford Topology Celebration conference, Stanford, May 2023.

Lead organizer, New four-dimensional gauge theories workshop, MSRI, October 2022.

Co-organizer, FRG Workshop “Moduli spaces of curves and maps”, Stanford, Feb. 2015.

Scientific organizer, 2012 IAS Program for Women in Mathematics, Princeton, May 2012.

Co-organizer, Special Session for the Association for Women in Mathematics “40 Years and Counting” anniversary meeting, Brown Univ, Sept. 2011.

Co-organizer 2009-2010 MSRI Special Year Program on Symplectic and Contact Geometry.

Co-organizer, Connection for Women workshop, MSRI, Aug. 2009.

Co-organizer, Algebraic structures in the theory of holomorphic curves workshop, MSRI, Nov 2009.

Co-organizer, Cyclic homology and symplectic topology workshop, AIM, Nov 2009.

Faculty advisor and PI, Kylerec Graduate Student Workshop in Symplectic and Contact Geometry, 2017-present.

Faculty advisor, SWIMM (Stanford Women in Math Mentoring) program.

Organize the Beatrice Yormark Distinguished Lecture Series, Stanford, 2012-present.

Co-organize monthly Northern California Symplectic Geometry seminar, 2004-present.